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APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 09/931,790 08/16/2001 Kedar Madineni 5166P004 3635 8791 **EXAMINER** 7590 04/22/2005 **BLAKELY SOKOLOFF TAYLOR & ZAFMAN** COURTENAY III, ST JOHN 12400 WILSHIRE BOULEVARD SEVENTH FLOOR ART UNIT PAPER NUMBER

2194

DATE MAILED: 04/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

|  |   | A 12 A                    | NI   | A 12 44 - 1            |       |  |
|--|---|---------------------------|--|------------------------|-------|--|
| Office Action Summary  |   | Applicati                 |  | Applicant(s)           |       |  |
|  |   | 09/931,7                  |  | MADINENI ET AL.        |       |  |
|  | Onice Action Guinnary   | Examine                   |  | Art Unit               |       |  |
|  | The MAN INC DATE of the control of  |                           | Courtenay III  | 2194                   |       |  |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply   |   |                           |  |                        |       |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). |   |                           |  |                        |       |  |
| Status   |   |                           |  |                        |       |  |
| 1) 又   | Responsive to communication(s) filed  | l on <i>07 March 2005</i> |  |                        |       |  |
|  | This action is <b>FINAL</b> . 2b) ☐ This action is non-final.   |                           |  |                        |       |  |
| ·—   | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is |                           |  |                        |       |  |
| -,   | closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.                       |                           |  |                        |       |  |
| Disposition of Claims  |   |                           |  |                        |       |  |
| 4)⊠ Claim(s) <u>1-8, 15-23</u> is/are pending in the application.  |   |                           |  |                        |       |  |
|  | 4a) Of the above claim(s) is/are withdrawn from consideration.  |                           |  |                        |       |  |
|  | 5) Claim(s) is/are allowed.   |                           |  |                        |       |  |
| ·  | Claim(s) 1-8 and 15-23 is/are rejected.   |                           |  |                        |       |  |
|  |   |                           |  |                        |       |  |
|  | Claim(s) are subject to restriction and/or election requirement.  |                           |  |                        |       |  |
| Application Papers   |   |                           |  |                        |       |  |
| 9) The specification is objected to by the Examiner.   |   |                           |  |                        |       |  |
|  | 10)⊠ The drawing(s) filed on <u>16 August 2001</u> is/are: a)⊠ accepted or b)□ objected to by the Examiner.     |                           |  |                        |       |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  |   |                           |  |                        |       |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).   |   |                           |  |                        |       |  |
| 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.   |   |                           |  |                        |       |  |
| Priority under 35 U.S.C. § 119   |   |                           |  |                        |       |  |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:   |   |                           |  |                        |       |  |
|  | <ol> <li>Certified copies of the priority documents have been received.</li> </ol>                              |                           |  |                        |       |  |
| 2. Certified copies of the priority documents have been received in Application No   |   |                           |  |                        |       |  |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage  |   |                           |  |                        |       |  |
| application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.  |   |                           |  |                        |       |  |
| All him  |   |                           |  |                        |       |  |
| ST. JOHN COURTENAY III Attachment(s) PRIMARY FYAMING   |   |                           |  |                        |       |  |
| Attachment(s)  Primary CANDED  Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)  |   |                           |  |                        |       |  |
| 2) 🔲 Notice  | of Draftsperson's Patent Drawing Review (PT   |                           | 4) Interview Summary (PTO-413) Paper No(s)/Mail Date |                        |       |  |
| 3) 🔲 Inform<br>Paper   | nation Disclosure Statement(s) (PTO-1449 or P<br>No(s)/Mail Date  | TO/SB/08)                 | 5) Notice of Informal Pa                             | atent Application (PTO | -152) |  |

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### **Response to Amendment**

#### **Response to Arguments**

Regarding Applicant's assertion that **Dziadosz** fails to disclose where a device provides information to the operating system, the Examiner notes that **Dziadosz** explicitly discloses: "the architecture 39 also facilitates transferring I/O requests (e.g., I/O reads and writes) between the local processing unit 12a and the local disk 32 along the conventional I/O path 36 in a manner well known to one of ordinary skill in the art" [See col. 7, lines 36-41]. The use of the notoriously well known terms of art, e.g., "I/O" (i.e., "Input/Ouput") and "read" and "write" clearly denote bi-directional communication.

#### **New Grounds of Rejection**

Applicant's remarks have been considered, but are deemed to be moot in view of the new grounds of rejection necessitated by Applicant's amendments to the claims. New grounds of rejection under **35 U.S.C. §103** are set forth below.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1- 6, 8, 15-20, 22, 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Dziadosz et al.** (U.S. Patent 5,832,222) in view of **Sadovsky et al.** (U.S. Patent Application Publication US 2002/0004852).

#### As per independent claims 1 & 15:

**Dziadosz** teaches a method in the kernel of an operating system comprising:

- receiving in the kernel [see "kernel layer 40" col. 7, line 43] of an operating system at least one request regarding at least one designated device of a plurality of devices from at least one application program [col. 7, line 48];
- communicating the at least one request from the kernel of the operating system to the at least one designated device via a well known communication protocol [see protocol discussion col. 8, lines 8-18];
- forwarding the information from the kernel of the operating system to the application program that sent the request [see transmission of data discussion col. 8, beginning line 53].

However, **Dziadosz** does not explicitly disclose the following additional limitations:

**Sadovsky** teaches <u>communicating asynchronous event</u> <u>information from the at least one designated device to the kernel of the operating system</u>, and forwarding the <u>asynchronous event</u> information from the kernel of the operating system to the application program that sent the request, as claimed [e.g., see §0045 where scanned image data is returned and associated discussion §0033 where the application makes the request, as claimed; see also kernel I/O functions, §0026 and also background discussion §0027].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to improve upon the system taught by **Dziadosz** by implementing the improvements detailed

above because it would provide **Dziadosz's** system with the enhanced capability of using simplified device drivers for operating hardware devices [**Sadovsky** §0006].

#### As per dependent claim 2:

**Dziadosz** teaches the at least one designated device comprises a remote device accessible via a network [see e.g., remote disk 32b, col. 7, lines 12 & 13; see also remote device discussion col. 12, line 5].

#### As per dependent claim 3:

**Dziadosz** teaches the at least one designated device comprises a local device [see e.g., local disk 32, col. 7, line 1].

#### As per dependent claim 4:

**Dziadosz** teaches the at least one request comprises at least one of a status request and a control request [see request type 64, fig. 6, and associated discussion col.9, beginning line 7].

#### As per dependent claim 5:

**Dziadosz** teaches the communications protocol is the user datagram protocol (UDP) [see UDP header 82, fig. 6 and associated discussion col. 11, line 3].

#### As per dependent claim 6:

**Dziadosz** inherently teaches receiving the request is achieved via at least one socket [UDP sockets are part of the User Datagram Protocol disclosed by Dziadosz, col. 11, line 3].

#### As per dependent claim 8:

**Dziadosz** teaches forwarding the information is achieved via a socket [UDP sockets are part of the User Datagram Protocol disclosed by Dziadosz, col. 11, line 3; the use of TCP/IP is also disclosed (inherently involving sockets as connection endpoints on the TCP/IP network, col. 8, line 10].

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### As per dependent claim 16:

See the rejection of claim 2 detailed above.

#### As per dependent claim 17:

See the rejection of claim 3 detailed above.

#### As per dependent claim 18:

See the rejection of claim 4 detailed above.

# As per dependent claim 19:

See the rejection of claim 5 detailed above.

#### As per dependent claim 20:

See the rejection of claim 6 detailed above.

## As per dependent claim 22:

See the rejection of claim 8 detailed above.

#### As per dependent claim 23:

**Dziadosz** broadly discloses the use of UNIX, this generic disclosure inherently encompassing the various flavors of UNIX, e.g., other UNIX or UNIX-like operating system dialects, such as LINUX [col. 1, line 28].

Claims 7 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Dziadosz et al.** (U.S. Patent 5,832,222) in view of **Sadovsky et al.** (U.S. Patent Application Publication US 2002/0004852), and further in view of **Belfiore** et al. (U.S. Patent Application Publication US 2002/0059425).

#### As per dependent claims 7 & 21:

**Dziadosz** & **Sadovsky** disclose the invention substantially as claimed, as discussed above.

However, **Dziadosz**, as modified by **Sadovsky**, does not explicitly teach the following additional limitations:

**Belfiore** teaches the use of a subscription request from an application program regarding at least one of the plurality of devices [§0132], receiving in the kernel of the operating system an event from one of the plurality of devices [§§0132, 0133]; and forwarding event information from the kernel of the operating system to the application program that sent the subscription request regarding the device, as claimed [§0132; see also event component description §§0124-0128].

It would have been obvious to one of ordinary skill in the art at the time the invention was made to improve upon the system taught by **Dziadosz** & **Sadovsky** by implementing the improvements detailed above because it would provide the combined system of **Dziadosz** & **Sadovsky** with the enhanced capability of "flexibility and choice of the service to publish events, such as, by way of example, kernel events" [see **Belfiore** col. 12, §§ 0132, 0133].

# **Prior Art not relied upon:**

Please refer to the references listed on the attached PTO-892 which are not relied upon in the claim rejections detailed above.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See **MPEP § 706.07(a)**. Applicant is reminded of the extension of time policy as set forth in **37 CFR 1.136(a)**.

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to **37 CFR 1.136(a)** will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Application/Control Number:

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#### How to Contact the Examiner:

Any inquiry concerning this communication or earlier communications from the examiner should be directed to St. John Courtenay III, whose telephone number is 571-272-3761. A voice mail service is also available at this number. The Examiner can normally be reached on Monday - Friday, 8:00 AM - 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, An Meng-AI who can be reached on 571-272-3756. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

### All responses sent by U.S. Mail should be mailed to:

Commissioner for Patents PO Box 1450 Alexandria, VA 22313-1450

# PTO CENTRAL FAX NUMBER: 703-872-9306

 Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2100 Group receptionist: (571) 272-2100.

ST. JOHN COURTENAY III
PRIMABY EXAMINER